COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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June 8, 2001

Ms. Ellen Snyder, Senior Environmental Engineer
Philip Morris U.S.A.
P.O. Box 26603
Richmond, VA 23261

Re: RCRA Inspection

EPA ID#: VAD000819466

Dear Ms. Snyder:

On May 17 & 18, 2001, an inspection of the Philip Morris MC Complex, Research, Development, & Engineering Building (RD&E), Operations Center (OC), and Flavor Center was conducted. It was found that this facility was not in total compliance with the Virginia Hazardous Waste Management Regulations (VHWMR) for Large Quantity Generators. Enclosed are copies of checklists completed for the above mentioned inspection.

A. The contingency plans for RD&E and OC do not include procedures/criteria to assess possible hazards to human health and the environment that may result from the release, fire, or explosion. 40 CFR 265.56(c) [as referenced by 9 VAC 20-60-265] requires that these emergency procedures be present in the contingency plan.

Please revise the contingency plans for RD&E and OC to include the above element.

B. The contingency plans for RD&E and OC do not specify that during an emergency, the emergency coordinator must take reasonable measures necessary to ensure that fires, explosions, or releases do not occur, reoccur, or spread to other hazardous waste at the facility. 40 CFR 265.56(e) [as referenced by 9 VAC 20-60-265] requires that these emergency procedures be present in the contingency plan.

Please revise the contingency plans for RD&E and OC to include the above element.

C. One-liter bottles of ink and solvent are placed on the second and third shelves in the MC Complex <90 day accumulation area before being decanted into a 55-gallon drum in the <90 day accumulation area. A portion of the solvent from these bottles is taken from the shelves to the video jet maintenance area for use as a commercial chemical product. The shelves onto which the bottles are placed are labeled "Empty Bottles". The labeling of these shelves in this manner presents several problems. Firstly, it is unclear

whether or not the material is waste or commercial chemical product. If the material in these bottles is waste, there is no proof that these bottles are decanted in a timely manner into the 55-gallon drum in <90 day accumulation. The possibility exists that the material in these bottles is actually exceeding the 90 day accumulation limit specified by 40 CFR 262.34(a) [as referenced by 9 VAC 20-60-262] by accumulating first in the bottles and then in the 55-gallon drum. Secondly, by taking some of the solvent from these bottles for use in the video jet repair shop, but decanting the rest of the solvent in the 55-gallon drum, material placed on this shelf may be viewed as being accumulated speculatively per 40 CFR 261.2(c)(4) [as referenced by 9 VAC 20-60-261].

Please label the shelves in the <90 day accumulation area in the MC Complex "Commercial Chemical Product" or with the name of the contents of these bottles. By labeling the shelves in this manner, hazardous waste determination (40 CFR 262.11 [as referenced by 9 VAC 20-60-262]) may take place when the waste ink and solvent is decanted into the drum, and not when the material is placed on the shelves.

D. Red NFPA cans of solvent waste are also placed on the bottom portion of the shelving in the MC Complex <90 day accumulation area. There is no proof that these cans are decanted in a timely manner into the 55-gallon drum in <90 day accumulation. The possibility exists that the material in these cans is actually exceeding the 90 day accumulation limit specified by 40 CFR 262.34(a) [as referenced by 9 VAC 20-60-262] by accumulating first in the cans and then in the 55-gallon drum.

Your facility keeps a log of the number of containers that are added to these shelves each day. In the future, please note the date when cans are added to the shelves, and the date when the contents of these cans are decanted into the 55-gallon drum in <90 day accumulation. These records will serve as proof that the hazardous waste in these cans does not accumulate past the 90 day limit.

Thank you for your assistance during this inspection. If you have any questions about this inspection or any other RCRA matter, please contact Mohammad Habibi at (804) 527-5153.

Sincerely,

Susan E. Shettle

Susan E. Shettle
Environmental Compliance Inspector

cc: G. Braun, DEQ - CO
File

January 1994

DEPARTMENT OF ENVIRONMENTAL QUALITY
WASTE DIVISION

SURVEY SHEET
FOR INSPECTION OF HAZARDOUS WASTE FACILITIES

NAME of FACILITY:	Philip Morris Manufacturing Center (MC) Complex – 3601 Commerce Rd. Research, Development, & Engineering (RD&E) – 4201 Commerce Rd. Operations Center (OC) - 2001 Wamsley Blvd. Flavor Center – 3601 Commerce Rd.	
ADDRESS:	4201 Commerce Road Richmond, VA 23234	
EPA ID NUMBER:	VAD000819466	
FACILITY REPRESENTATIVE:	Ellen Snyder	Curtis Hinton
TITLE:	Sr. Environmental Engineer Environmental Compliance & Engineering	Sr. Environmental Engineer MC Environmental
TELEPHONE NUMBER:	(804) 274-5221	(804) 274-4769
INSPECTOR'S NAME:	Susan E. Shettle	
TITLE:	Environmental Compliance Inspector	
DATE of INSPECTION:	May 17 & 18, 2001	

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1. What is the business activity of the firm? (i.e., furniture mfg., metal plating, recycling,etc.)

   MC Complex – manufactures cigarettes and processes tobacco
   RD&E – Performs product research and development
   OC – Mostly administration; some research and development labs (an extension of RD&E)
   Flavor Center – manufactures flavorings for tobacco

2. Give a brief description of the waste stream(s) [by chemical name, if possible] and hazardous waste code(s) generated by the firm.

A. MC Complex & OC:

WASTE STREAM	WASTE CODE
1) Waste Paint Related Material	D001
2) Waste Printing Ink	D001, F003
3) Waste Parts Washer Solvent	F002
4) Waste Gasoline	D001, D018
5) Solvent Soak Debris	F003
6) Waste Parts Washer Solvent	D039
7) Solvent-Contaminated Rags	D001, F003
8) Crushed Spent Fluorescent Tubes	D009
9) Lead Paint Chips	D008
10) Battery Debris	D008
11) Alcohol-Based Flavor Contaminated Solids	D001
12) Waste Cleaning Liquid	D002
13) Waste Mercury in Manufactured Articles	D009
14) Waste Lithium Batteries	D003
15) Ink Contaminated Solids	D001, F003
16) Immersion Cleaner	D001, D006, D027, D039, D040, F002
17) Waste Sulfuric Acid	D002
18) Waste Photo Fixer Solution	D011
19) Rinse Waste Contaminated with Solvents	F002, F003
20) Solvent Spill Cleanup	D001
21) Trichloroisocyanuric Acid	D001
22) Waste Cleaning Liquid	D006, D008
23) Wase Fusee (Railway or Highway)	D001
24) Waste Ammonia Solutions	D002
25) Waste Flavoring Extracts	D001
26) Waste Lead Insulation Blankets	D008
27) Solvent Contaminated Soil	D001, F003
28) Lead, Hydrochloric Acid	D008
29) Sodium Metasilicate	D002
30) Waste Propane	D001

B. RD&E BUILDING:

WASTE STREAM	WASTE CODE
1) Waste Flavors: Methanol, Ethanol, Methylene Chloride	D001
2) Various Lab Packs	Various
3) Smoke Condensate: Nicotine, Methanol, Nitric Acid	D001, D002

4) Vanadyl Sulfate Hydrate:	P106, D003, P098, P104,
Sodium Cyanide, Potassium Cyanide, Silver Cyanide	P075, D030, D011
5) Roller Stencil Ink	D001
6) Alcohol Based Inks	D001
7) Acrylic Epoxy	D006
8) Sulfuric Acid	D002, D004, D006, D007, D008, D011
9) Nicotine Extract	U169, P008, D039 P075, P203, U188, U007
10) Aldicarb	P070
11) Mercury in Manufactured Articles	D009
12) Solvent Contaminated Solids	D001, F003
13) Waste Solvents	D001, F003
14) Parts Washer Solvent	D001, D039, D008
15) Compactor Liquid (Mixed Solvents)	D001, F003
16) Compactor Waste	D001, F003
17) Waste Chloroform	U044
18) Waste Freon	U121

C. FLAVOR CENTER:

WASTE STREAM	WASTE CODE
1) Waste Flavors (Ethanol, Propylene Glycol)	D001

3. List the highest amounts of hazardous waste ever generated in any month of the calendar year and the greatest amount ever accumulated at the site of each type of waste generated.

A. MC Complex and OC

Waste Code	Amount Generated	Amount Accumulated
1) D001	200 lb.	200 lb. (shipped 1/18/01)
2) D001, F003	1900 lb.	1900 lb. (shipped 4/20/01)
3) F002	100 lb.	400 lb. (shipped 5/16/01)
4) D001, D018	3600 lb.	3600 lb. (shipped 3/19/99)
5) F003	90 lb.	90 lb. (shipped 1/18/01)
6) D039	800 lb.	800 lb. (shipped 5/16/01
7) D001, F003	400 lb.	400 lb. (shipped 4/20/01)
8) D009	250 lb.	250 lb. (shipped 3/16/01)
9) D008	350 lb.	350 lb. (shipped 4/20/01)
10) D008	75 lb.	75 lb. (shipped 4/20/01)
11) D001	80 lb.	80 lb. (shipped 4/20/01)
12) D002	30 lb.	30 lb. (shipped 5/16/01)
13) D009	10 lb.	10 lb. (shipped 5/16/01)
14) D003	10 lb.	10 lb. (shipped 5/16/01)
15) D001, F003	420 lb.	420 lb. (shipped 11/16/01)

16) D001, D006, D027, D039, D040, F002	240 lb.	240 lb. (shipped 9/15/01)
17) D002	45 lb.	45 lb. (shipped 8/17/00)
18) D011	15 lb.	30 lb. (shipped 11/14/00)
19) F002, F003	2640 lb.	2640 lb. (shipped 11/4/00)
20) D001	5040 lb.	5040 lb. (shipped 11/4/00)
21) D001	50 lb.	50 lb. (shipped1/13/99)
22) D006, D008	48 lb.	48 lb. (shipped 1/7/99)
23) D001	60 lb.	60 lb. (shipped 3/19/99)
24) D002	40 lb.	40 lb. (shipped 8/9/99)
25) D001	6400 lb.	6400 lb. (shipped 8/18/99)
26) D008	80 lb.	80 lb. (shipped 9/14/99)
27) D001, F003	100 lb.	100 lb. (shipped 9/21/99)
28) D008	200 lb.	200 lb. (shipped 10/20/99)
29) D002	300 lb.	300 lb. (shipped 12/20/99)
30) D001	100 lb.	100 lb. (shipped 7/17/98)

B. RD&E BUILDING

Waste Code	Amount Generated	Amount Accumulated
1) D001	2696 lb.	2696 lb. (shipped 2/17/99)
2) Various	1-200 lb.	Various
3) D001, D002	89 lb.	89 lb. (shipped 2/11/98)
4) P106, D003, P098, P104, P075, D030, D011	32 lb.	32 lb. (shipped 3/23/98)
5) D001	120 lb.	120 lb. (shipped 6/10/98)
6) D001	308 lb.	308 lb. (shipped 6/10/98)
7) D006	106 lb.	106 lb. (shipped 7/16/98)
8) D002, D004, D006, D007, D008, D011	406 lb.	406 lb. (shipped 9/17/98)
9) U169, P008, D039, P075, P203, U188, U007	221 lb.	221 lb. (shipped 7/16/98)
10) P070	1 lb.	1 lb. (shipped 7/16/98)
11) D009	17 lb.	17 lb. (shipped 4/29/98)
12) D001, F003	1631 lb.	1631 lb. (shipped 9/17/98)
13) D001, F003	1298 lb.	1298 lb. (shipped 6/14/00)
14) D001, D039, D008	214 lb.	214 lb. (shipped 12/21/99)
15) D001, F003	1120 lb.	1120 lb. (shipped 7/19/00)
16) D001, F003	2075 lb.	2075 lb. (shipped 1/20/99)
17) U044	225 lb.	225 lb. (shipped 12/20/99)
18) U121	432 lb.	432 lb. (shipped 7/19/99)

C. FLAVOR CENTER:

Waste Code	Amount Generated	Amount Accumulated
1) D001	17600 lb.	17600 lb. (shipped 2/21/01)

4. Does the facility ever generate greater than:
1 kg. of acutely toxic waste (P listed waste or F020-F023 and F026-F027)? YES NO

NOTE: RD&E occasionally generates waste nicotine, which is a P listed waste.

100 kg of clean-up from a spill of P listed waste or F020-F023 and F026-F027 waste? YES NO
If yes, then the facility is a large quantity generator.

5. How is the waste presently being handled? Where is it sent?
(List all transporters and facilities, or on-site treatment performed).

TRANSPORTER: Environmental Transfer Corporation NJD991291584
TRANSPORTER: Advanced Environmental Technical Services NJD080631369
TRANSPORTER: C.I. Whitten Transfer Company WVD063480065
TRANSPORTER: Freehold Cartage, Inc. NJD054126164
TRANSPORTER: Chemical Waste Management ILD099202268
TRANSPORTER: Tri-State Motor Transit Company MOD095038998
TRANSPORTER: Safety Kleen Corporation ILD984908202
FACILITY: Safety Kleen Corporation VAD981043011
FACILITY: Advanced Environmental Technical Services NCD986166338
FACILITY: Trade Waste Incineration ILD098642424
FACILITY: Chemical Waste Management Resource Recovery, Inc. OHD093945293

NOTE: Philip Morris continues to utilize Safety Kleen parts washers and solvents; however, the company no longer uses Safety Kleen as a transporter or TSDF as of 2001. AETS (Onyx Environmental) now takes all spent solvent from Safety Kleen parts washers.

6. Does the facility generate any hazardous waste that is excluded from regulation? If yes, list the waste and the basis for exclusion. YES NO

NOTE: Spent fluorescent tubes are shipped for reclamation as Universal Waste.

7. Does the facility:

Generate Market Burn

used oil that is burned for energy recovery? Underline or circle all that are applicable. (If the facility markets or burns used oil, fill out the Used Oil Checklist.) YES NO

Does the generator of used oil to be burned for energy recovery (other than a Conditionally Exempt Small Quantity Generator) mix the used oil with hazardous waste? If YES, then fill out the Used Oil Checklist.

NOTE: AETS (Onyx Environmental) takes used oil from the Research Development and Engineering facility. The MC Complex has its oil taken for fuel blending by Safety Kleen.

8. Does the facility generate any hazardous waste that is reclaimed that is reclaimed to recover economically feasible amounts of gold, silver, platinum, palladium, iridium, osmium, rhodium, ruthenium, or any combination of these? YES NO

If Yes, list the waste, where it is sent, and complete the Metals Recovery Checklist.

9. Does the facility generate, transport, store, collect or reclaim spent lead-acid batteries? If yes, Underline or circle all that are applicable. If the facility stores batteries before reclaiming them, complete the Metals Recovery Checklist. YES NO

NOTE: Onyx Environmental recycles used batteries.

10. Based on the above, the facility is a:

a. conditionally exempt small quantity generator
b. small quantity generator
c. generator
d. permitted or interim status TSD
e. unpermitted TSD (explain in comments section)
f. transporter
g. other: please explain_____

[Underline or Circle All That Are Applicable]

11. Check accumulation times and quantities for the three types of generators. If the times or quantities are exceeded, then the facility is moved up to the next category. Complete the appropriate checklist(s).

A conditionally exempt small quantity generator can accumulate for an indefinite period of time until he has accumulated 1000 kg (approx. 5-55-gallon drums) of non-

acute hazardous waste, at which time the accumulation time (180 days or 270 days) for small quantity generators begin.

Small quantity generators can accumulate hazardous waste for up to 180 days or 270 days if the disposal site is over 200 miles away (in containers and tanks only). However, if at any time over 6000 kgs of waste is accumulated, then the small quantity generator becomes a generator, or an unauthorized facility, as applicable.

12. List each container and tank accumulation area. Specify the number and capacity of each tank and container. [Note: Include any satellite accumulation areas. Verify that only 55 gallons of any particular hazardous waste code (or one quart of acutely toxic waste) is at that area.]

Location	Number of Containers	Number of Tanks	Capacity

MC COMPLEX:

A) 23 ink stations (1 @ each process row) – satellites
- •each station has 1 gal. ink contaminated solids
- •2 gal. waste ink/makeup fluid

B) Video Jet Repair Room - satellite
- •1 gal. ink contaminated solids
- •2 gal. waste ink/makeup fluid

C) Non hazardous staging area
- •1 fiberboard drum for broken Fl tubes
- •10 ft. fiberboard container for spent lamps

D) Paint Spray Booth - satellite
- •1-55 gallon drum of thinner waste (1/3 full)

E) Delta Shop – satellite
- •5 gal. container for Mercury Ampoule (empty)

F) Flavor Lab
- •1-5 gal. waste ethanol-based flavors (taken to RD&E <90 day area)
- •30 gal. plastic container of solids contaminated with ethanol (taken to RD&E <90 day area)

G) SK Parts Washer in Maintenance Room

H) SK Parts Washer in Finished Goods Maintenance Room

I) SK Parts Washer in MRC

J) <90 Accumulation Area:
- •150 – 200 bottles (1L. each) of Video-Jet Makeup Fluid and Ink on shelves in area (each with 1-3' of material in the bottom)
- •1-55 gal drum where 1L. bottles are decanted

RD&E BUILDING:

A) There are 120 labs total in the RD&E Building → approximately 80-90 of these labs have satellite containers
- •Approximately 10 of these labs (on three different floors) were spot checked
  - •Each lab had one or more of the following:
    - •5 gal. mixed waste solvents
    - •30 gal. solvent contaminated solids or vials containing mixed waste solvents
    - •1 gal. mixed waste solvents
    - •1 gal. vials containing mixed waste solvents

B) Building C-115 (<90 day accumulation area for flammables)

•1-55 gal. mixed solvents (accumulation start date: 5/12/01)
•1-55 gal. hazardous waste flavor (nearly empty)
•1-55 gal. mixed lab solvents (nearly empty)
•7-5 gal. lab containers to be emptied into the appropriate 55 gallon drum

C) Building C-116 (<90 day accumulation area for maintenance-related waste andnonsolvent lab packs)
•1 gal. old paint
•2 small cylinders of propane
•1 gal. methylene chloride vials
•1 gal. acetonitrile methanol vials
•½ gal. acetone
•various lab packs – acids
•various lab packs – toxics

D) Building C-117 (<90 day accumulation area for waste vials and their contents)
•Vial Crusher is located in this room
•1-55 gal. container for "Compactor Liquid Waste"
•Crushed vials are also shipped as Hazardous Waste, although none were in accumulation at the time of inspection

E) Building C-118(<90 day accumulation area for Universal Waste)
•2-8 ft. fiberboard containers for spent fluorescent tubes
•1 small fiberboard container for broken tubes
•1-55 gal. container for articles containing PCB's

OPERATIONS CENTER:

A) There are 25 labs total in the OC Building → nearly all of these labs have satellite containers
•Two of these labs were spot checked → all of the labs contain a combination of the following:
•1-5 gal. container of mixed solvent
•1-30 gal. solvent vials/solids contaminated with solids

B) <90 day accumulation area
•12-5 gal. containers of mixed waste solvent
•4-2 gal. mixed ink/video jet fluid
•2-8 ft. fiberboard containers spent fluorescent tubes
•2-2 ft. fiberboard containers spent fluorescent tubes
•1-30 gal. container solvent contaminated solids
•Several 100 mL used nicotine bottles (P Listed waste)

FLAVOR CENTER:

A) Production Area (satellite)
•1-55 gallon container waste solvent based flavor

B) Laboratory Area (satellite)
•4-5 gal. waste flavors by lab bench (all were full)
•2-5 gal. waste flavors under ventilation hood (both were filling)
1-1 gal. waste ethanol under ventilation hood

C) Universal Waste Area – MER Room
•No spent bulbs in accumulation at the time of inspection

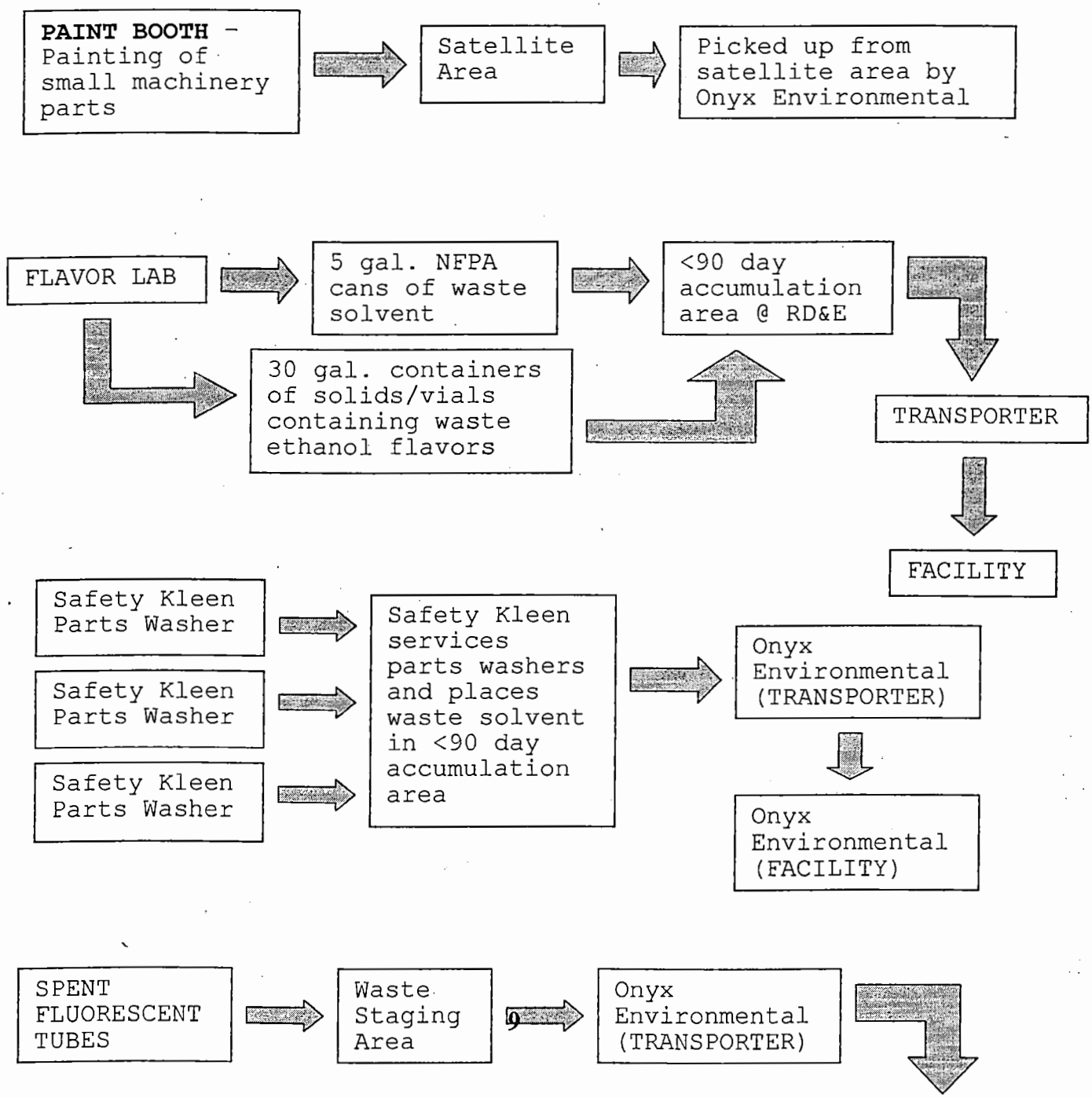
13. Comments:

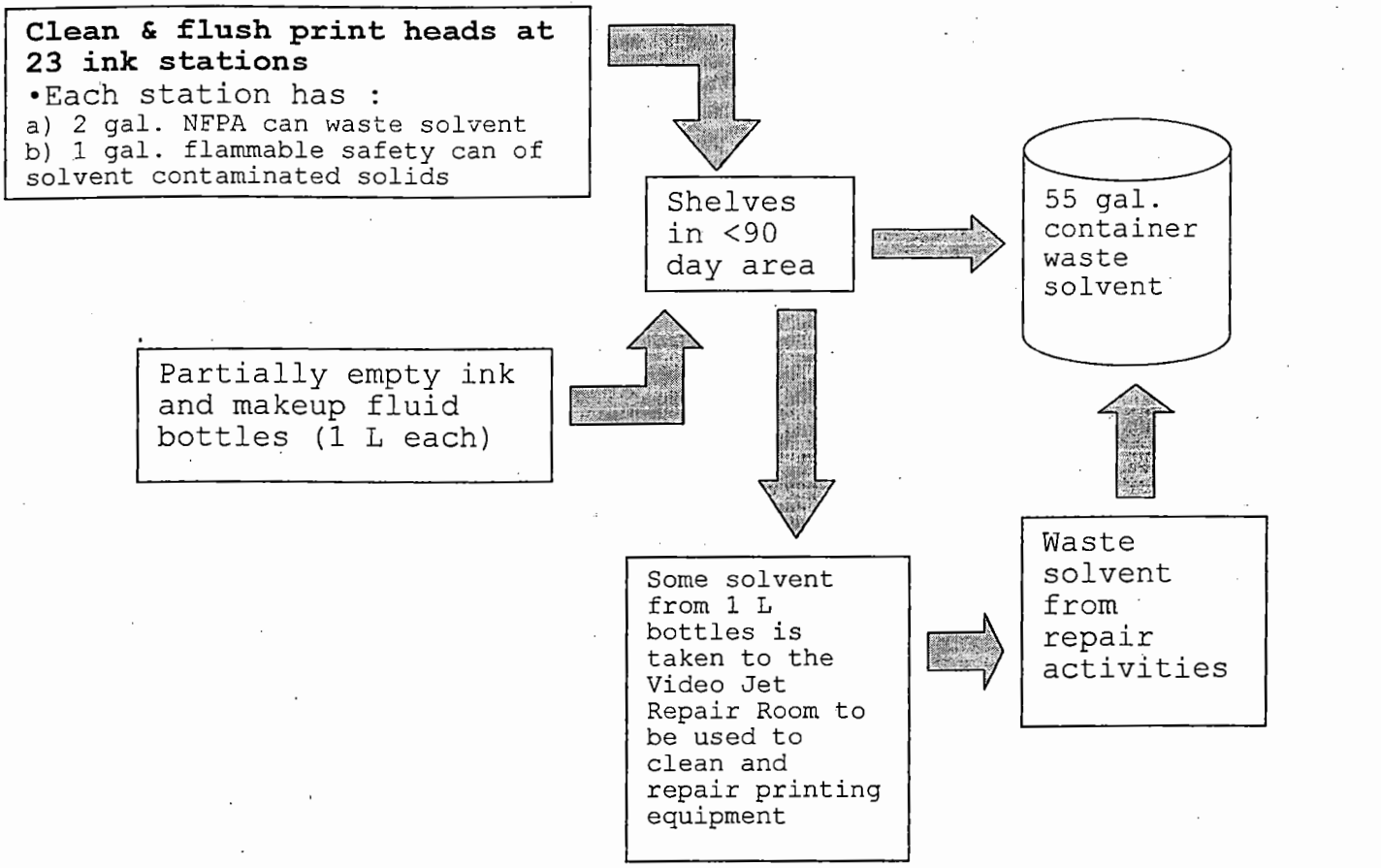
There is no <90 day accumulation area at the Flavor Center. All wastes taken from satellite accumulation in the Flavor Center are taken to the appropriate <90 day accumulation area at the RD&E Building.

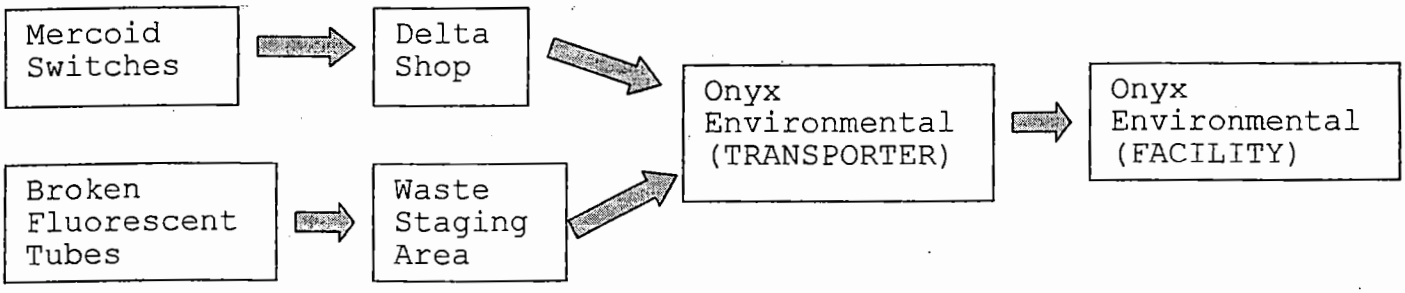
14. **Waste Management Flow Diagram:**

(On this page sketch a brief, but detailed, flow diagram that includes how and where the waste is generated, the steps through a treatment system (if any), the steps through storage including satellite accumulation areas. Do this for each waste stream including excluded hazardous waste. Include any wastewater treatment facilities at the company, and verify the type of units included in the system, and any hazardous waste streams going to WWT.)

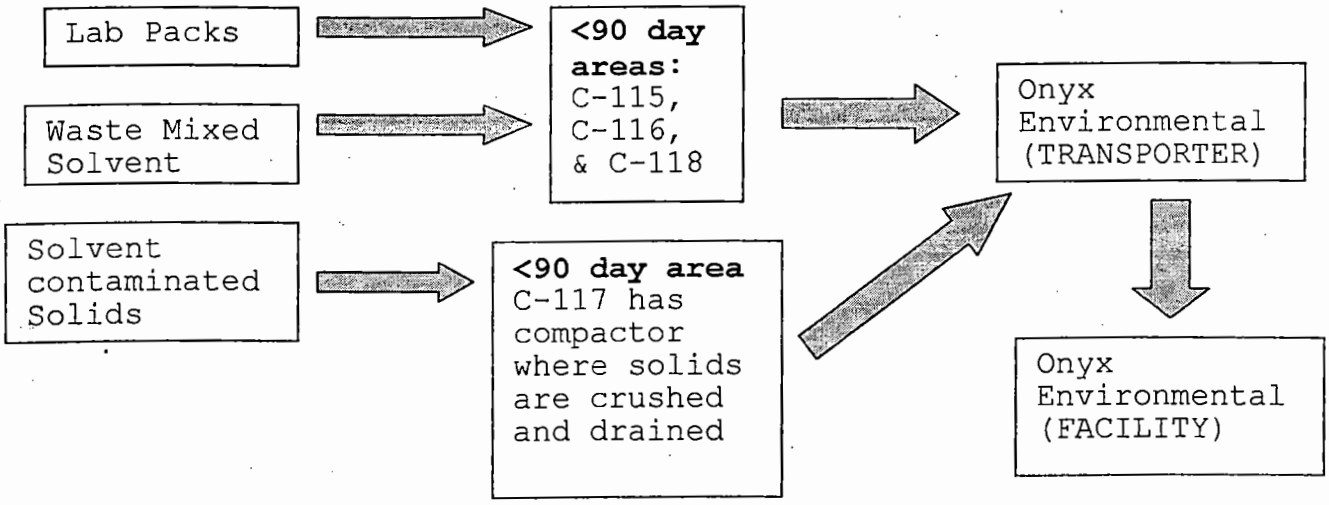
MC COMPLEX:



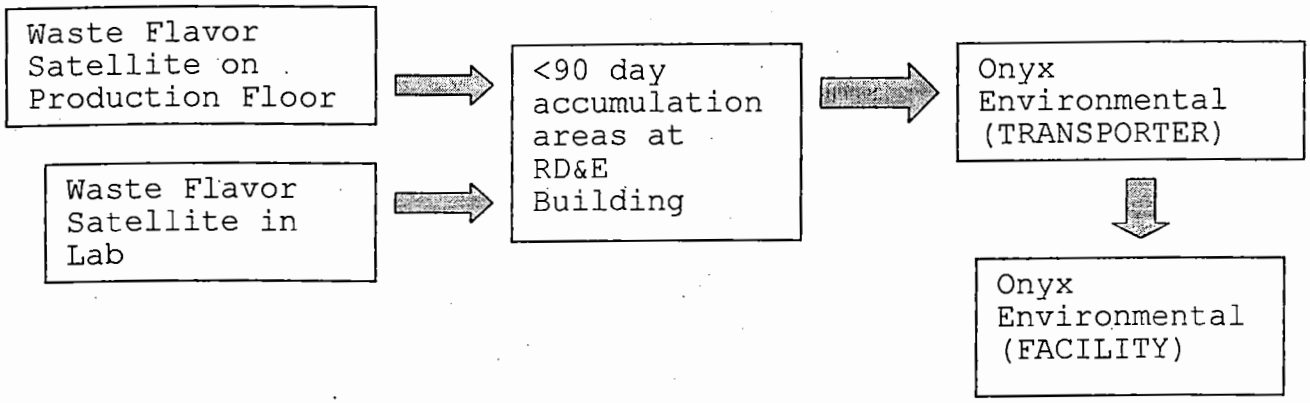

Clean & flush print heads at 23 ink stations
•Each station has :
a) 2 gal. NFPA can waste solvent
b) 1 gal. flammable safety can of solvent contaminated solids
Shelves in <90 day area
55 gal. container waste solvent
Partially empty ink and makeup fluid bottles (1 L each)
Some solvent from 1 L bottles is taken to the Video Jet Repair Room to be used to clean and repair printing equipment
Waste solvent from repair activities


Mercoid Switches
Delta Shop
Broken Fluorescent Tubes
Waste Staging Area
Onyx Environmental (TRANSPORTER)
Onyx Environmental (FACILITY)

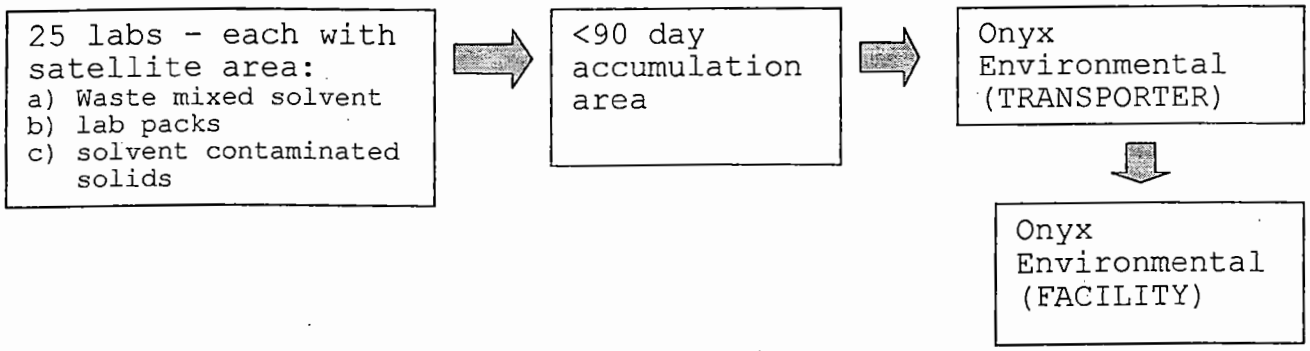
RD&E BUILDING:



FLAVOR CENTER:



Operations Center:



5. GENERATORS CHECKLIST

NA = Not Applicable, NC = Non-Compliance

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	SECTION A – MANIFEST				
262.20	1. Does generator ship waste off-site?	X			
262.20	2. Does generator use manifest?	X			
	a. If no, is generator a small quantity generator (generating between 100 and 1000 kg/month?) NOTE: SQGs are only exempt if wastes are reclaimed. (See §262.20(e).)			X	
	1. If yes, does generator indicate this when sending waste to a TSD facility?	X			
Part 262 Appendix	b. If yes, does manifest include the following information?				
	1. Manifest document no.	X			
	2. Generator's name, mailing address, telephone no.	X			
	3. Generator EPA I.D. no.	X			
	4. Transporter Name(s) and EPA I.D. no.(s)	X			
	5. Facility name, address, and EPA I.D. no.	X			
	6. Alternate facility name, address, and EPAI.D. no.	X			
	7. Instructions to return to generator if undeliverable	X			
	8. Waste information required by DOT – shipping name, quantity (weight or vol.), containers (type and number)	X			
	9. Emergency information (optional) (special handling instructions, telephone no.)	X			
	10. Is the following certification on each manifest form? "This is to certify that the above named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable national and international regulations."	X			
262.40	11. Does generator retain copies of manifests? If yes, complete a through g. (§262.23)	X			
	a. Did generator sign and date all manifests?	X			

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	b. Did generator obtain handwritten signature and date of acceptance from initial transporter?	X			
262.40	c. Does generator retain one copy of manifest signed by generator and initial transporter?	X			
262.40	d. Do returned copies of manifest include facility owner/operator signature and date of acceptance?	X			
262.42	12. Have manifests been received from the TSD facility for any waste which was shipped over 45 days ago?	X			
	a. If no, has the generator filed an exception report?			X	
	b. Does the exception report include:				
	1. a legible copy of the manifest for which the generator does not have confirmation of the delivery? and			X	
	2. a cover letter explaining the efforts taken to locate the shipment?			X	
262.11	**SECTION B – HAZARDOUS WASTE DETERMINATION**				
	3. Does generator generate solid waste(s) listed in Subpart D (List of Hazardous Waste)?	X			
	4. Does generator generate solid waste(s) listed in Subpart C that exhibit hazardous characteristics (corrosivity, ignitability, reactivity, TC)?	X			
	a. Does generator determine characteristics by testing or by applying knowledge of processes?	testing & process knowledge			
	1. If determined by testing, did generator use test methods in Part 261, Subpart C (or equivalent)?			X	
262.11	5. Has the generator evaluated all solid wastes to determine whether the solid wastes are hazardous wastes?			X	
	SECTION C – PRETRANSPORT REQUIREMENTS				
262.30	6. Does generator package waste in accordance with 49 CFR 173, 178, and 179 (DOT requirements)?	X			
	a. Are containers to be shipped leaking or corroding?		X		

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	b. Complete **Checklist 4. Containers** to evaluate condition of containers.				
	c. Is there evidence of heat generation from incompatible wastes in the containers?		X		
262.31	7. Does generator follow DOT labeling requirements in accordance with 49 CFR 172?	X			
262.32	8. Does generator mark each package in accordance with 49 CFR 172?	X			
262.32	9. Is each container of 110 gallons or less marked with the following label? HAZARDOUS WASTE - Federal Law Prohibits Improper Disposal. If found, contact the nearest police or public safety authority or the U.S. Environmental Protection Agency.	X			
	a. Generator name(s) and address(es)	X			
	b. Manifest document No.	X			
262.33	10. Does generator have placards to offer to transporters?	X			
262.34	11. Accumulation time				
	a. Are containers used to temporarily store waste before transport?	X			
262.34(a)(2)	1. If yes, is each container clearly dated.	X			
262.34(a)(3)	2. If yes, is each container labeled or clearly marked with the words "Hazardous Waste?"	X			
262.34(c)(1)	12. Does the generator have satellite accumulation areas where up to 55 gallons of any one type of hazardous waste (HW) (1qt acutely HW) are accumulated? If yes,	X			
262.34 (c)(1)(ii)	a. Are the containers marked with the words "Hazardous Waste" or other words that identify the contents of the container?	X			
262.34(c)(1)	13. Are amounts in excess of those allowed being accumulated in the satellite accumulation area? If yes,		X		
	a. Has the generator marked the excess amount with the date the excess amount began accumulating? and			X	
	b. Has the generator either removed the excess amount within three days of the date of excess accumulation or has the generator complied with all other provisions for accumulation areas. Namely, has the generator notified the Executive Director about the location of the accumulation area?			X	
262.40	**SECTION D – RECORDKEEPING AND RECORDS**				
	14. Does generator keep the following reports for 3 years?				

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	a. Manifest or signed copies from designated facilities	X			
	b. Biennial reports	X			
	c. Exception reports			X	
	d. Test results	X			
	15. Where are the records kept (at facility or elsewhere)? OPERATIONS CENTER				
	SECTION E – SPECIAL CONDITIONS				
	16. Has the primary exporter received from or transported to a foreign source any hazardous waste?		X		
262.53	a. If yes, has he filed a notice with the Regional Administrator?			X	
262.54	b. Is this waste manifested and signed by a foreign consignee?			X	
262.54	c. If generator transported wastes out of the country, has he received confirmation of delivered shipment?			X	
268	**SECTION F – LDR REQUIREMENTS**				
	17. Does the facility generate, transport, treat, store or dispose any land-restricted wastes?	X			
	18. Is land disposal of wastes occurring? If yes,		X		
	a. Has the facility been granted an extension to the effective date for land restriction applicable to its restricted waste? OR			X	
	b. Has the facility been granted an exemption from prohibition pursuant to a petition for those land-restricted wastes and units covered by the petition? OR			X	
	c. Are the wastes hazardous only because they exhibit a hazardous characteristic and are they disposed outside the Commonwealth into an injection well without exhibiting any prohibited characteristic of hazardous waste at the point of injection?			X	
268.5	19. Has the owner/operator submitted an application for case-by-case extension to the effective date of any applicable restriction?		X		
268.6	20. Has the owner/operator been granted a petition seeking an exemption from a prohibition for the disposal of hazardous waste in a particular unit or units?		X		
268.3	21. Are facility representatives diluting the restricted waste or residual from treatment of the restricted waste as a substitute for adequate treatment, to circumvent the effective date of prohibition, to otherwise avoid a prohibition, or to circumvent a land disposal prohibition?		X		

40 CFR CITATION		REGULATION	YES	NO	NA	NC
268.4	22.	Is the facility treating land-restricted wastes in a surface impoundment or series of surface impoundments? (Note: Evaporation of hazardous constituents in a surface impoundment as the principal means of treatment is not considered to be an acceptable form of treatment for land restricted wastes.)		X		
	23.	If yes, complete **Check Sheet 12. Surface Impoundments.**				
	24.	Is the facility treating waste in Tanks or Containers in order to meet applicable treatment standards under 268.40?		X		
268.7(a)(4)		a. If Yes, has the facility developed a Waste Analysis Plan?			X	
268.7(a)(4)(ii)		b. Has the Waste Analysis Plan been filed with the Director a minimum of 30 days prior to the treatment activity?			X	
268.7(a)(1)	25.	Restricted wastes, which the generator is managing for which he has not met the applicable treatment standards, has the generator accompanied each shipment of waste with a notification to the treatment facility of the appropriate treatment standards and any applicable prohibitions?	X			
	26.	Did the notification include the following information:				
268.7(a)(1)(i)		a. EPA Hazardous Waste Number?	X			
268.7(a)(1)(ii)		b. The waste constituents that the treater will monitor, if monitoring will not include all regulated constituents?	X			
268.7(a)(1)(iii)		c. The manifest number associated with the shipment of waste? and	X			
268.7(a)(1)(v)		d. Waste analysis data, where available?	X			
268.7(a)(2)	27.	For restricted wastes which the generator has determined can be land disposed without further treatment, has the generator accompanied each shipment of waste with a notification and certification to the land disposal facility that the waste meets the applicable treatment standards and the applicable prohibitions set forth in 268.32 or RCRA section 3004(d)?			X	
	28.	Did the notification include the following information:				
268.7 (a)(2)(i)(A)		a. EPA Hazardous Waste Number?			X	
268.7 (a)(2)(i)(B)		b. The waste constituents that the treater will monitor, if monitoring will not include all regulated constituents?			X	
268.7 (a)(2)(i)(C)		c. The manifest number associated with the shipment of waste? And			X	
268.7 (a)(2)(i)(D)		d. Waste analysis date, where available?			X	

40 CFR CITATION	REGULATION	YES	NO	NA	NC
268.7(a)(2)(ii)	29. Was the certification signed by an authorized representative, and did it state the following: "I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment."			X	
268.7(a)(3)	30. Has the generator received a case-by-case exemption on restricted waste, been granted an exemption through petition, or those wastes subject to a national variance, has the generator forwarded notice with the waste to the land disposal facility stating that the waste is exempt from the land disposal restrictions?		X		
268.7(a)(7)	31. Does the generator retain on-site copies of all notices, certifications, demonstrations, waste analysis data, and other documentation for at least five years from the date the waste was last sent to on-site or off-site treatment, storage or disposal?	X			
	32. Is the generator storing land restricted waste? (For one year storage only)		X		
	33. If yes, is the storage on-site solely for the purpose of the accumulation of such quantities of hazardous waste as necessary to facilitate proper recovery, treatment or disposal?			X	

COMMENTS:

7. HEALTH & SAFETY CHECKLIST

NA = Not Applicable, NC = Non-Compliance

40 CFR CITATION	REGULATION	YES	NO	NA	NC
264/265.16(a)(1)	**SECTION A - OUTLINE OF PERSONNEL TRAINING PROGRAM**				
	1. Does the facility have a written training program?	X			
264/5.16(c) and (d)(3).	2. Does the program consist of:				
	a. strictly classroom instruction?		X		
	b. strictly on-the-job training?		X		
	c. classroom instruction AND on-the-job training?	X			
	3. Is an annual refresher course required for personnel whose positions at the facility are related to hazardous waste management?	X			
264/265.16 (d)(1) and (2)	**SECTION B - JOB TITLE/JOB DESCRIPTION**				
	4. Is a job title provided for each employee whose position at the facility is related to hazardous waste management?	X			
	5. Is a job description provided for each employee whose position at the facility is related to hazardous waste management?	X			
264/265.16(a)(2)	**SECTION C - TRAINING DIRECTOR**				
	6. Is the training program directed by a person trained in hazardous waste management?	X			
264/265.16(a)(2)	**SECTION D - RELEVANCE OF TRAINING TO JOB POSITION**				
	7. Are facility personnel instructed in hazardous waste management procedures (including contingency plan implementation) relevant to their positions?	X			
264/265.16(a)(3)	**SECTION E - TRAINING AND EMERGENCY RESPONSE**				
	8. Does the training program include the following emergency response procedures **where applicable**?				
	a. Procedures for using, inspecting, repairing, and replacing facility emergency and monitoring equipment?	X			
	b. Key parameters for automatic waste feed cut-off systems?			X	
	c. Procedures for utilizing communications or alarm systems?	X			
	d. Directions for responding to fires or explosions?	X			
	e. Procedures for groundwater contamination response?			X	
	f. Procedures for conducting shutdown operations?	X			

40 CFR CITATION	REGULATION	YES	NO	NA	NC
264/265.16(b), (d)(4) and (3)	**SECTION F - IMPLEMENTATION OF TRAINING PROGRAM**				
	9. Are all facility personnel trained within six months of their employment or assignment to the facility or transfer to a new position?	X			
	10. Are facility personnel allowed to work unsupervised before their training program has been completed?		X		
	11. Are records maintained which document that the required training has been given to and completed by facility personnel?	X			
264/265.33	**SECTION G - TESTING AND MAINTENANCE OF EQUIPMENT**				
	12. Does the owner/operator test and maintain (as necessary to assure its proper operation in time of emergency) the following equipment:				
	a. All communications or alarm systems?	X			
	b. Fire protection equipment?	X			
	c. Spill control equipment?	X			
	d. Decontamination equipment?	X			
264/265.15	**SECTION H - GENERAL INSPECTION REQUIREMENTS (PERMITTED FACILITIES ONLY)**				
	13. Does the owner/operator maintain a written schedule at the facility for the inspection of:				
	a. Monitoring equipment?			X	
	b. Safety and emergency equipment?			X	
	c. Security devices?			X	
	d. Operating and structural equipment?			X	
	e. Types of problems with equipment:			X	
	1. Malfunction			X	
	2. Operator error			X	
	3. Discharges			X	
	14. Does the schedule identify the types of problems to look for?			X	
	15. Is the frequency of inspection based on the possible deterioration of equipment and the probability of incident?			X	
	16. Are areas subject to spills, such as loading and unloading areas, inspected daily?			X	
	17. Does the owner/operator maintain an inspection log? If yes, does the log include:			X	
	a. Date and time of inspection?			X	
	b. Name of inspector?			X	
	c. Notations of observations?			X	
	d. Date and nature of repairs or remedial actions?			X	
	18. Have any malfunctions or other problems not been remedied? (Summarize in comments section.)			X	
264/265.35	**SECTION I - REQUIRED AISLE SPACE**				

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	19. Does the facility maintain aisle space to allow unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment?	X			
	20. If aisle space is not maintained, has the owner/operator demonstrated to the Regional Administrator that the space is not needed?			X	
264/265.32	**SECTION J - EQUIPMENT REQUIREMENTS**				
	21. Is there evidence of fire, explosion, or contamination of the environment? If yes, explain in the comment section.		X		
	22. Is the facility equipped with the following:				
	a. An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel?	X			
	b. A device such as a telephone (immediately available) or handheld two-way radio capable of summoning emergency assistance from police, fire, or state or local emergency response teams?	X			
	c. Portable fire extinguishers?	X			
	d. Fire control equipment (including special extinguishing equipment such as foam, inert gas, or dry chemical)?	X			
	e. Spill control equipment?	X			
	f. Decontamination equipment?	X			
	g. Water at adequate volume and pressure to supply water hose streams, or foam producing equipment, or automatic sprinklers, or water spray systems?	X			
264/265.17(a) and (b)	**SECTION K - REQUIREMENTS FOR IGNITABLE, REACTIVE, OR INCOMPATIBLE WASTES**				
	23. Does the facility handle ignitable or reactive waste? If yes:	X			
	a. Does the owner/operator take the following precautions to prevent accidental ignition or reaction of wastes: Separate and protect ignitable or reactive wastes from sources of ignition or reaction (open flames, smoking, cutting, welding, hot surfaces, frictional heat, static electrical or mechanical sparks, spontaneous ignition, and radiant heat?	X			
	24. Does the owner/operator confine smoking and open flames to specially designated locations, while ignitable or reactive waste is being handled?	X			
	25. Are "No Smoking" signs placed conspicuously wherever there is a hazard from ignitable or reactive waste?	X			
	26. Does the owner/operator have procedures in place to prevent accidental ignition or reaction of wastes?	X			

40 CFR CITATION	REGULATION	YES	NO	NA	NC
264/265.50 through §265.56	**SECTION L - CONTINGENCY PLAN**				
	27. Does the owner/operator have a Contingency Plan, or a Spill Prevention Control and Counter measures (SPCC) Plan, or some other emergency plan, that is amended for hazardous waste management?	X			
	28. Is a copy maintained at the facility?	X			
	29. Has a copy been submitted to all local police and fire departments, hospitals, and State and local emergency response teams?	X			
	30. Does the plan describe the control procedures taken in the event of a fire, explosion, or release?	X			
	31. Does the plan describe how and when it will be implemented?	X			
	32. Does the plan describe arrangements agreed to by local police and fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services?	X			
	33. Does the plan list names, addresses, and phone numbers (office and home) of all persons qualified to act as emergency coordinators?	X			
	34. Is one person named as the primary coordinator?	X			
	35. Does the coordinator have the authority to commit the resources to carry out the emergency plan?	X			
	36. Does the plan physically describe and identify the location of all emergency equipment at the facility?	X			
	37. Does the plan include provisions to ensure that the equipment is cleaned and fit for its intended use before operations are resumed?	X			
	38. Does the plan include an evacuation plan for facility personnel?	X			
	39. Does the plan describe:				
	a. Signal(s) to be used to begin evacuation?	X			
	b. Evacuation routes?	X			
	c. Does the plan describe the methodology for immediate notification of:				
	1. Facility personnel?	X			
	2. State or local agencies with designated response roles?	X			
	40. Does the plan include procedures for identification of released materials?	X			
	41. Does the plan include procedures/criteria to assess possible hazards to human health and the environment that may result from the release, fire, or explosion?		X		X
	42. Does the plan describe all reasonable measures necessary to ensure that fires, explosions, or releases do not occur, reoccur, or spread to other hazardous waste at the facility?		X		X

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	43. Does the plan describe procedures to monitor for leaks, pressure buildup, gas generation, or ruptures in valves, pipes, or other equipment if the facility stops operation in response to a fire, explosion, or release?	X			
264/265.37	**SECTION M - NECESSARY AGREEMENTS WITH LOCAL AUTHORITIES**				
	44. Has the owner/operator made the following arrangements:				
	a. Familiarized police, fire departments, and emergency response teams with the layout of the facility and associated hazards?	X			
	b. Designated one police and fire department with primary emergency authority when more than one might respond?			X	
	c. Agreements with State emergency response teams, contracts, and equipment supplies?	X			
	d. Familiarized local hospitals with the properties of waste handled at the facility and the types of injuries or illness that could result?	X			
	45. Where authorities decline to enter into such arrangements, has the owner/operator documented the refusal?			X	

COMMENTS:

QUESTION 41 &42. The contingency plans for RD&E and OC do not include procedures/criteria to assess possible hazards to human health and the environment that may result from the release, fire, or explosion and all reasonable measures necessary to ensure that fires, explosions, or releases do not occur, reoccur, or spread to other hazardous waste at the facility.

4. CONTAINERS CHECKLIST

NA = Not Applicable, NC = Non-Compliance

40 CFR CITATATION	REGULATION	YES	NO	NA	NC
264/5.171	**SECTION A - USE AND MANAGEMENT**				
	1. Are containers in good condition?	X			
264/5.172	**SECTION B - COMPATIBILITY OF WASTE WITH CONTAINER**				
	2. Is container made of a material that will not react with the waste which it stores?	X			
264/5.173	**SECTION C - MANAGEMENT OF CONTAINERS**				
	3. Is container always closed while holding hazardous waste?	X			
	4. Is container not opened, handled, or stored in a manner which may rupture it or cause it to leak?	X			
264/5.174	**SECTION D – INSPECTIONS**				
	5. Does owner/operator inspect containers at least weekly for leaks and deterioration?	X			
264/5.176	**SECTION E – IGNITABLE AND REACTIVE WASTES**				
	6. Are containers holding ignitable and reactive waste located at least 15 m (50 ft) from facility property lines?	X			
	PERMITTED FACILITIES ONLY				
264/5.177	**SECTION F – INCOMPATIBLE WASTE**				
	7. Are incompatible wastes or materials placed in the same containers?			X	
	8. Are hazardous wastes placed in washed, clean containers when they previously held incompatible waste?			X	
	9. Are incompatible hazardous wastes separated from each other by a berm, dike, wall, or other device?			X	
264.178	**SECTION G – CLOSURE**				
	10. Do container storage areas have a containment system?			X	
	11. At closure, were all hazardous wastes and associated residues removed from the containment system?			X	

COMMENTS:

5. VIRGINIA SPECIFIC CHECKLIST

NA = Not Applicable, NC = Non-Compliance

40 CFR CITATION	REGULATION	YES	NO	NA	NC
9 VAC 20-60-261 B.5	**FOR CESQGs DISPOSING OF HAZARDOUS WASTE IN SOLID WASTE LANDFILLS**				
	1. If the generator has disposed of or managed hazardous waste at a solid waste or Subtitle D landfill, has the generator first obtained written permission from the landfill and the Department?		X		
9 VAC 20-60-262 B.4	**GENERATOR/TSD NOTIFICATION OF ACCUMULATION AREAS**				
	2. Has the generator or TSD facility notified the Department of the exact location of his accumulation areas (note: satellite areas are excluded) at least 15 days prior to the establishment of the area?	X			
9 VAC 20-60-261 B.8	**MANAGEMENT OF LOW-LEVEL RADIOACTIVE WASTE**				
	3. Does the facility generate radioactive wastes defined as low-level radioactive materials by the USNRC, or does the facility generate "mixed wastes" consisting of the above and listed hazardous wastes, or which exhibits a characteristic of a hazardous waste?		X		
	SPECIFY WASTE -- LIST HAZARDOUS WASTE CLASSIFICATION AND RADIONUCLIDES				
	4. Does the generator manage his mixed or low-level radioactive wastes in accordance with the general requirements for hazardous waste management specific to his generator category ?		X		
	Please specify: NOTE: Low-level and "mixed" low-level radioactive wastes are classified as "hazardous wastes" by the Virginia regulations, and must be managed in accordance with applicable generator category requirements as specified on the general checklists				
9 VAC 20-60-264 B.12 and 9 VAC 20-265 B.13	**WOOD PRESERVER DRIP PAD MANAGEMENT Also complete applicable checklists for generator category and additional subpart W requirements.**				
	5. Does the facility operate (check all that apply):			X	
	Existing HSWA drip pads contracted or constructed before 12/6/90?			X	
	Existing non-HSWA drip pads contracted or constructed before 1/14/93?			X	
	New drip pads (all other)?			X	

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	6. For all applicable, has the owner/operator installed a leak collection system:				
	a. For HSWA drip pads constructed after 12/24/92?			X	
	b. For non-HSWA drip pads constructed after 9/8/93?			X	
	c. For all new drip pads?			X	
	NOTE: If "No" to the above, this is a POTENTIAL VIOLATION. Please specify:				
PART XVI	**STATE DECLARED UNIVERSAL WASTE MANAGEMENT** In addition to the general requirements for Universal Waste Handlers (9 VAC 20-60-260 and 9 VAC 20-60-273), if the generator manages state declared universal wastes (Mercury containing lamps) verify compliance with the following state specific requirements:				
9 VAC 20-60-1495	7. Universal waste declaration -- has the generator chosen to manage his mercury containing lamps:				
	a. Under the general provisions for hazardous waste?(HW requirements)		X		
	b. Or, the special universal waste provisions?(Universal waste requirements)	X			
	c. Or, has not specified a management plan or made a declaration? (HW determination and management requirements apply.)		X		
	d. Or, as a CESQG waste?(characterization required)		X		
	NOTE: If the generator does not actively manage his mercury containing lamp waste as a universal waste, or if it is CESQG waste managed with other solid waste, then it must be characterized under the general requirements of 9 VAC 20-60-261.				
9 VAC 20-60-1505 C.1	8. Does the generator manage universal waste mercury containing lamps in accordance with the general requirements for universal waste handlers?	X			
9 VAC 20-60-1505 C.2	9. Does the generator manage the universal waste to prevent constituent releases to the environment by:				
	a. Containing unbroken lamps in packaging that will minimize breakage?	X			
	b. Containing broken lamps in packaging the will minimize release of fragments and residues?	X			
	c. Otherwise managing lamps so as to minimize breakage (specify)?			X	
	To be in compliance, one or more of the above must be "yes", otherwise.				
	And: d. Immediately containing all releases of residues?	X			
	e. Determining if any released material or clean-up residue or other waste generated from lamp management is a hazardous waste?	X			

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	If either of the above are "no", this is a POTENTIAL VIOLATION. Please specify details of release/determination:				
	10. Does the generator crush mercury containing lamps on-site?		X		
9 VAC 20-60-1505 C.3	a. If "yes", then are the lamps crushed in a device which is a mechanical unit designed for such use?			X	
	b. Is operated so as to minimize release of mercury to the workplace and the environment and is in compliance with 29 CFR 1910.1000?			X	
	c. Has a documented procedure for operation?			X	
	d. Is equipped with containment and filtration of process air flows to remove mercury-containing vapors and dusts?			X	
	If any if the above are "no," this is a POTENTIAL VIOLATION.				
9 VAC 20-6-1505 C.4	11. In addition to the general marking and labeling requirements for Universal Wastes, are waste mercury containing lamps and containers marked or labeled with the words "Universal Waste Mercury-containing lamps", or, "Waste Mercury-containing Lamps", or, "Used Mercury-containing Lamps"?	X			

COMMENTS:

17. RCRA WASTE MINIMIZATION CHECKLIST

NA = Not Applicable, NC = Non-Compliance

40 CFR CITATION	REGULATION	YES	NO	NA	NC
	SECTION A - STATUTORY/REGULATORY REQUIREMENTS				
262.20(a)	1. Has the manifest been certified by an authorized representative?	X			
262.20(a)	2. Has the waste minimization statement on the manifest been altered or deleted?	X			
262.20(a) 264/5.75	3. Does the facility have a written description of their waste minimization program?	X			
	If a written description is not provided, can the facility personnel provide a verbal description of the waste minimization program?			X	
	4. Is there any visual evidence of the facility's waste minimization efforts? If yes, describe the activities/program observed in the comment section.	X			
	5. Does the description in the biennial report and/or annual export reports include:				
262.41(a)(6) 262.56(a)(5)(i) 264/265.75(h)	a. A description of the efforts undertaken during the year to reduce the volume and toxicity of waste generated?	X			
262.41(a)(7) 262.56(a)(5)(ii) 264/265.75(i)	b. A description of the changes in volume and toxicity of waste actually achieved during the year in comparison to previous years?	X			
262.41(a)(8) 262.56(a)(6) 264/265.75(j)	c. Certification by the generator or authorized representative? (§262.56(a)(6) requires certification by primary exporter, §§264/5.75(j) requires certification by the owner/operator or authorized representative.)	X			
264.73(b)(9)	6. For permitted facilities, does the operating record contain a certification by permittee (at least annually) that the permittee has a program in place to reduce the volume and toxicity of the hazardous wastes?			X	
	SECTION B - PERMIT/ENFORCEMENT REQUIREMENTS				
	7. Does the facility's permit contain any waste minimization requirements? If yes, briefly describe in the comment section whether the requirements and indicate if they have been met.			X	
	SECTION C - PERMIT/REGULATORY REQUIREMENTS				
	8. Are there waste minimization requirements contained in enforcement orders or settlement agreements with the facility? If yes, briefly describe in the comment section whether the requirements and indicate if they have been met.			X	

COMMENTS:
- NONHAZARDOUS SOLVENTS HAVE BEEN PLACED IN MOST PARTS WASHERS.
- BATTERIES, FLUORESCENT TUBES, LIGHT BALLASTS ARE TAKEN FOR RECLAMATION AS UNIVERSAL WASTE.
- NONHAZARDOUS ADHESIVES ARE SOLIDIFIED BEFORE PLACEMENT IN LANDFILL.